

IT IS CLAIMED:

1. An isolated polynucleotide comprising a nucleic acid sequence which encodes or is complementary to a sequence which encodes an *ANT1* polypeptide having at least 70% sequence identity to the amino acid sequence presented as SEQ ID NO:2.
2. The polynucleotide of Claim 1 comprising a nucleic acid sequence that hybridizes under high stringency conditions to the nucleic acid sequence presented as SEQ ID NO:1, or the complement or a fragment thereof.
3. The polynucleotide of Claim 1 wherein the *ANT1* polypeptide has at least 80% sequence identity to the amino acid sequence presented as SEQ ID NO:2.
4. The polynucleotide of Claim 1 wherein the *ANT1* polypeptide has at least 90% sequence identity to the amino acid sequence presented as SEQ ID NO:2.
5. The polynucleotide of Claim 1 wherein the *ANT1* polypeptide has the amino acid sequence presented as SEQ ID NO:2.
6. The polynucleotide of Claim 1 comprising the nucleic acid sequence presented as SEQ ID NO:1, or the complement thereof.
7. A plant transformation vector comprising an isolated polynucleotide of Claim 1.
8. A transgenic plant cell comprising the vector of Claim 7.
9. A method of producing an *ANT1* phenotype in a plant, said method comprising introducing into progenitor cells of the plant a plant transformation vector according to claim 7 and growing the transformed progenitor cells to produce a transgenic plant, wherein said polynucleotide sequence is expressed and said transgenic plant exhibits an *ANT1* phenotype.
10. A plant obtained by a method of Claim 9.

11. A plant part obtained from a plant according to Claim 10.

12. A method of selecting a transformed plant comprising a first polynucleotide comprising the steps of:

- (a) introducing into progenitor cells of the plant a plant transformation vector comprising the first polynucleotide and an *ANT1* polynucleotide according to Claim 1, and
- (b) growing the progenitor cells to produce a plant that displays the *ANT1* phenotype, wherein the plant that displays the *ANT1* phenotype is selected as a transformed plant that also comprises the first polynucleotide.

ANT1: 067007